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DSSD CENSUS 2000 PROCEDURES AND OPERATIONS MEMORANDUM SERIES#U-5

MEMORANDUM FOR Ruth Ann Killion
Chief, Planning, Research, and Evaluation Division

From: Howard Hogan *Howard Hogan*
Chief, Decennial Statistical Studies Division

Subject: Study Plan for the Analysis of Selection Criteria of Clusters Sent
Directly for Housing Unit Follow-up, N.5

Attached is the study plan for the Analysis of Selection Criteria of Clusters Sent Directly for Housing Unit Follow-up, N.5. The Census 2000 Evaluation Program quality assurance process was applied to the methodology development and the study plan review process. The study plan is sound and appropriate for completeness and accuracy, and it answers its intended category questions as appropriate.

If you have questions about this study plan, please contact Xijian Jim Liu on (301) 457-8325.

Attachment (Analysis of Selection Criteria of Clusters Sent Directly for Housing Unit Follow-up, N.5. Study Plan)

cc: Evaluations Executive Steering Committee
Keith Bennett (PRED)
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**Census 2000 Operational Summary
Study Plan
(Final)**

I. Name of Operation

Analysis of Selection Criteria of Clusters Sent Directly for Housing Unit Follow-up.
DSSD Census 2000 Evaluation Project N.5.

II. Project Manager

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III. Operational Background

A. Census 2000

The Accuracy and Coverage Evaluation (A.C.E.) measures the overall and differential coverage of the US population in Census 2000. The major steps of the A.C.E. are housing unit matching and person matching. In the housing unit phase, housing units within the sample block clusters were listed and matched to the January 2000 version of DMAF. Housing units were first matched using a computer. At this stage, each address was assigned a of the following match codes:

M = The A.C.E. and census addresses match

P = The A.C.E. and census addresses possibly match

NI = The A.C.E. address is not matched to a census address.

NE = The census address is not matched to an A.C.E. address.

Then it followed a clerical review which included a clerical match and a clerical search for duplicates. After computer matching, certain clusters determined to have little benefit from clerical review skipped clerical review and were sent directly for follow-up interview. This was to reduce the clerical review workload and to allow the housing unit follow-up to start earlier.

Each of the following four sets of criteria determined, in priority order, which clusters skipped clerical review. For all criteria, clusters must have no more than 4 housing units coded P.

Criteria for all urban and rural clusters

1. Have NEs, but no NIs.
2. Have NIs, but no NEs.

Additional criteria for all urban areas and only rural areas that have 100 percent house number and street name addresses in both the ACE and census universes.

3. Clusters must meet all three additional conditions:
 - a. $P+NI+NE$ is less than or equal to 15.
 - b. $NI+NE$ is not equal to zero.
 - c. NI must not be equal to NE when NI is less than 6.
4. Clusters must meet both additional conditions:
 - a. $|NI-NE|$ is greater than or equal to 11.
 - b. The difference between the sum of P , NI , and NE and the absolute value of the difference in NI and NE is less than or equal to 15.

These criteria identified clusters with few A.C.E. nonmatches or few census nonmatches to skip clerical review and directly went to housing unit follow-up. There were 3295 clusters skipped clerical matching, including 28 relisted clusters that were treated as no housing unit matching. This study will consider the 3267 clusters not relisted.

IV. Questions to be Answered and Methodology

This study evaluates the current skip criteria.

1. Should the current skip criteria be changed for future matching operations?
 - a. Methodology
 - Compute the number of skipped clusters that satisfy each of the skip criteria and examine the characteristics and frequency distributions of skipped clusters. Number of housing units and number of nonmatches in these clusters will also be computed.
 - Compare the housing unit duplicate rates between clusters that skipped clerical review and clusters that did not skip clerical review.
 - Compare the housing unit follow-up interview workloads (percent of addresses sent to follow-up) for clusters that satisfy each of the skip criteria and clusters that did not skip clerical review.
 - Using the person interview outcome code, compute and compare the number of deletes as not a housing unit after person interview between clusters that skipped clerical review and clusters that did not skip clerical review.
 - Compare the percent of non-matches before HUFU that become matches during AFU for clusters that skip clerical review and clusters that did not skip clerical review.

We will consider these variables in the analysis: urban/rural, types of

enumeration area, single unit/multi unit and regions. If time is permitted, we will rematch clusters that skipped BFU clerical review. For these rematched clusters, we will examine the resulting follow-up workload with the original follow-up workload.

b. Limitation

See V.

c. Processing Requirements

(1) Programming and Computer

Data to be used in this study will be extracted from :

- ACE HUMaRCS files from preliminary housing unit matching.
- ACE PERMaRCS file,
- ACE sampling file,
- HCUF files.

Clusters skipped clerical matching are identified by a variable BFCDONE with a value of 8 (skip BFU phase with follow-up) in the account file.

These data files will be provided by DSSD and are expected to be available in January, 2001.

V. Limitations

There are several limitations. 1). The differences in duplicate rates may be affected by other variables. 2). Rematching more than 3,000 skip clusters could be too labor intensive with the limited human resources and limited time. 3). Relisted clusters and List and Enumerate clusters have no housing unit matching and are excluded from this study.

VI. Milestone Schedule

Activity	Start Date	End Date
1. Develop Study Plan	03/01/00	06/30/00
2. Specify Data Needs	03/01/00	06/30/00
3. Specify Other Activities	03/01/00	06/30/00
4. Finalize Study Plan	06/01/00	08/31/00
5. Conduct A.C.E.	09/07/99	05/22/01
6. Delivery of the Data	01/01/00	01/31/00

7.	Start Analysis	03/01/01	09/30/01
8.	Start/End First Draft of the Report	10/01/01	12/31/01
9.	Roundtable Presentation	12/00/01	12/31/01
10.	Start/End Second Draft of the Report	01/01/02	03/31/02
11.	Prepare Final Report for Signature	04/01/02	05/31/02
12.	Report is Issued	06/01/02	07/31/02

VII. Related Studies/Operations

None.

VIII. References

Accuracy and Coverage Evaluation: The Design Document, Danny R. Childers, DSSD Census 2000 Procedures and Operations Memorandum Series, Chapter S-DT-1.